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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,425	01/12/2001	Bart F. Rice	18721-5695	2323

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FENWICK & WEST LLP
TWO PALO ALTO SQUARE
PALO ALTO, CA 94306

EXAMINER
CANGIALOSI, SALVATORE A

ART UNIT	PAPER NUMBER
2661	7

DATE MAILED: 11/27/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/759,425	Ricet	
	Examiner	Art Unit	
	Salvatore Cangialosi	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 September 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2* .
18) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other: .

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the claimed invention is directed to non-statutory subject matter.

2. Claims 2-19 are rejected under 35 U.S.C. 101 because the claims are drawn to non-statutory subject matter because signals are outside the four statutory classes of invention. Signals are neither a manufacture nor a composition of matter as appellant alleges but a transitory emanation of a previously patented apparatus and method. Once a signal has left a transmitter, nothing in that signal can tie it to a specific process or apparatus out of the plurality of processes or apparatuses which could have produced it, hence those limitations are meaningless. The appellant has produced no evidence to the contrary. This attempt to patent signals in free space is akin to patenting an audio or television program or **any other signal** in free space after transmission but before reception. There is no reason why these transitory and ephemeral emanations should be included in the four statutory classes of invention.

What is patentable? Despite the request by the applicant in the parent case that the Examiner provide authority for a holding that transitory emanations which can exist in the United States for no more than a two hundredths of a second(Divide width

of United States by the speed of light), the appellant has been unable to cite any authority stating that signals per se are included within the four statutory categories of invention. Since competent authority is silent, the decision with respect to this case will set useful precedent for others to follow. Any signal in free space is transitory, ephemeral and not useful without transmission or reception. It is a short lived intermediate having no utility in and of itself without the process and apparatus of transmission or reception. The examiner respectfully suggests that they are the later and hence not statutory. The Board of appeals has previously agreed with the Examiner in the affirmance dated 3/24/99. At the bottom of page 18 of the decision in the parent case, the Board goes on to say "Even if the signal were in a wire, which requires the movement of physical matter such as electrons, the signal is the propagating disturbance in the medium, not the medium itself. Therefore we cannot agree with appellants argument that the claimed subject matter fits within the category of composition of matter". The addition of the term electromagnetic is merely descriptive of the type of signal and the signal remains disembodied nonetheless. There is no media on which the signal is embodied. It remains unpatentable.

3. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
>
> Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

4. Claims 2-19 are rejected under 35 U.S.C. § 103 as being unpatentable over Hamatsu et al or Short et al.

Regarding claims 2-4, Hamatsu et al or Short et al(See Fig. 1 of either) disclose a composite spreading code produced from shift registers substantially as claimed. The differences between the above and the claimed invention is the absence of specifics of the carrier wave. At. Col. 5, lines 45-50 of Short et al, it is stated that the transmission can be either AM or Fm. It is obvious that either are typically sinusoids. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for Hamatsu et al or Short et al because it is conventional and standard practice to

employ a sinusoidal carrier for composite spreading signals and these components are no more than the conventional equivalents of what is disclosed in the primary items of evidence. The deficiencies of the art with respect to some of the dependent claims deal with the conventional spread spectrum communication protocols.

5. Applicant's arguments filed 9/10/01 have been considered but are considered to be more specific than the claimed invention. With respect to patent 5,568,202, it is noted that the "electronic reference signal" is embodied "in a system". Therefore it is not similar to the claims. The slide 17 requires that the medium is not as important as whether the functionality of the software (or signal) is embodied or disembodied on a medium. The current claims are disembodied and hence not patentable. Restriction to a medium, a system or the element of a process would make the claims patentable.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE

STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication should be directed to Salvatore Cangialosi at telephone number (703) 305-1837.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms, can be reached at (703) 305-4703.

Any response to this action should be mailed to:

Commissioner of Patent and Trademarks

Washington, D.C. 20231

or faxed to (703)872-9314(for Technology Center 2600 only)

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, Virginia, Sixth Floor(Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.